APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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025537 TM02/1010	**EXAMINER**
WORLDCOM, INC.	TAROENCHONWANIT, B
TECHNOLOGY LAW DEPARTMENT	

ART UNIT	PAPER NUMBER
2152	

1133 19TH STREET NW
WASHINGTON DC 20036

DATE MAILED:

10/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _13 June 2001_ .

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-43, 45-97 and 99-109_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-19 and 58-75_ is/are rejected.

7)☒ Claim(s) _20-43, 45-57, 76-97 and 99-109_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _24 September 1998_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____ .

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)		4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)		5) ☐ Notice of Informal Patent Application (PTO-152)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _11,12,14_ .		6) ☐ Other: .

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after allowance or after an Office action under *Ex*

Parte Quayle, 25 USPQ 74, 453 O.G. 213 (Comm'r Pat. 1935). Since this application is eligible

for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been

timely paid, prosecution in this application has been reopened pursuant to 37 CFR 1.114.

Applicant's submission filed on 6/13/2001 has been entered.

2.   The indicated allowability of claims 1-43, 45-97 and 98-109 is withdrawn in view of the

newly discovered reference(s) to Cianfrocca, Carroll, Riggins, Radia, and Hogan. Rejections

based on the newly cited reference(s) follow.

3.   Claims 1-43, 45-97 and 99-109 are presented for examinations.

4.   Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate

sheet within the range of 50 to 250 words. It is important that the abstract not exceed 250 words

in length since the space provided for the abstract on the computer tape used by the printer is

limited. The form and legal phraseology often used in patent claims, such as "means" and "said,"

should be avoided. The abstract should describe the disclosure sufficiently to assist readers in

deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the

title. It should avoid using phrases which can be implied, such as, "The disclosure concerns,"

"The disclosure defined by this invention," "The disclosure describes," etc.

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-3 and 58-60 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cianfrocca et al. (US. 6,088,796) and Hogan (US. 5,699,528).

7.   Claim 1, Cianfrocca discloses the invention substantially, including an integrated system

for providing a plurality of communications network management services and products to a

customer over the public internet, said network management services and products accessible

from a client workstation employing a client browser associated with said customer and

receiving web based communications from a communications service enterprise (Abstract,

combination of clients system messenger server, application servers)

Cianfrocca discloses (a) one or more secure web servers for managing one or more

secure client sessions over the internet in response to customer entry into said system, each said

one or more secure web servers supporting secure communications with said client workstation

(Fig. 1, messenger system (MS) 103; Fig. 3, HTTPS; Fig. 4, DMZ) for providing a secure

transportation of data transactions between the user interface and the one or more secure servers;

Cianfrocca discloses (b) one or more client applications integrated within a web-based

GUI and downloaded from the one or more secure web servers according to predetermined

customer entitlements, each of said one or more client applications for providing a customer

interface integrated within said web based GUI and enabling interactive communications with

one or more communications network management resources provided by said communications

service enterprise via the one or more secure web servers (abstract, user queries application

server through firewall; Col. 14, lines 20-24, Web Browsers server as client to messenger system and associated application server).

Cianfrocca discloses (c) each of said one or more secure web server supporting communication of request messages entered by said customer via said customer interface to said one or more network management resources providing a desired communications network management function (Fig. 3, browser communicate HTTPS with MS).

Cianfrocca discloses one or more remote application resource processes said request messages and provides responses to said one or more secure web servers for secure uploading to said client browser and display via said integrated customer interface (Col. 17, lines 29-40, communication between application servers and client browser got through MS).

Cianfrocca discloses a client application downloaded from the one or more secure web servers for enabling selection and presentation of invoice documents in accordance with customer entitlements, said client application further generating an invoice request message in response to customer selection of a specific invoice option and forwarding the invoice request message via the secure web server (Col. 4, lines 11-19, browser) .

Cianfrocca does not explicitly disclose network management resources including a system for generating invoice; invoice server maintains a database of image files associated with invoice documents.

However, in the same field of endeavor, Hogan teaches a financial transaction system for delivery billing that applicable for various enterprises such as financial company (Col. 5, lines 5-15), which is equivalent to a system for generating invoice documents for enterprises. Hogan teaches after authentication, a web page loading from a server for customer making selection in

accordance with customer privilege (Fig. 2A-2B, and Fig. 3; Col. 6, lines 9-30), which

equivalent to a client application downloaded from the one or more secure web servers for

enabling selection and presentation of invoice documents in accordance with customer

entitlements, said client application further generating an invoice request message in response to

customer selection of a specific invoice option and forwarding the invoice request message via

the secure web server.

Hogan teaches invoice server (Fig. 1, 160) capturing and storing billing images in form

that allowed customer to download for viewing printing and storing (Col. 4, line 53-Col. 5, lines

15), which is equivalent to an invoice application server for maintaining a database of image files

associated with invoice documents from the application service and receiving the invoice request

message, said invoice application server accessing the database in response to a request message,

generating a response message including a customer selected invoice document, and

downloading said response message to said client workstation, whereby said customer selected

invoice document is formatted in a manner suitable for display via said integrated client

interface. Even though, Hogan does not expressly using its system for generating

communication management invoice, but Hogan suggests it system for improving financial

transactions for various business including telephone company (Col. 4, lines 45-50).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made incorporate Hogan's system with Cianfrocca network secure system for

expanding system in any organizations. Doing so will allow the organization migrate system

from manually report, invoice generating and paper billing, which having a high cost per unit to

automate system, reducing billing dispute due to slow mail service, ensuring clients privacy,

preventing unsuitable materials to reach certain client, including ensuring network data security.

8.   Claim 2, Cianfrocca-Hogan discloses said one or more secure web servers supports a

secure sockets layer communications protocol including secure socket connections for encrypted

communication between said client browser and said secure web server, said one or more secure

servers also providing session management including customer identification, validation,

entitlements and encryption to link said session with said customer (Cianfrocca, HTTPS Col. 17,

lines 20-40).

9.   Claim 3, Cianfrocca-Hogan discloses a dispatch server for communicating with said one

or more secure web servers and a plurality of said one or more remote application resources, said

dispatch server providing verification of system access and proxy generation for said system

resources after customer's entitlements have been verified (Fig. 1, server 105, firewall' Col. 18,

lines 24-26).

10.   Claims 4 and 61 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cianfrocca- Hogan, as applied to claims 2 or 60, and in view of Carroll (US. 6,105,131).

11.   Cianfrocca-Hogan discloses the invention substantially, but fails to disclose the system

uses digital certificates for authentication.

However, using the digital certificate for authentication is not new, in the same field of

endeavor, Carroll teaches a system for securing data distributed, which includes the use of digital

certificate for client to sign in (Carroll, Fig. 5, 80, 84-87; Fig. 6, Fig. 110-132; Col. 7, line 20-

Col. 9, lines 48).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made incorporate the use of digital certification with Cianfrocca-Hogan. Doing so

will simplify and speed up customer authentication process.

12.   Claims 5 and 62 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cianfrocca-Hogan as applied to claims 2 or 60, and in view of Riggins et al. (US. 6,131,116).

13.   Claim 5, Cianfrocca-Hogan discloses the invention substantially, but does not explicitly

disclose

        Said downloaded web-based GUI comprises;

        a backplane object downloaded with, and launched by said web-based GUI, said

backplane object launching said one or more client applications upon initiation by said customer,

        the backplane object further enabling inter-application communications among the

client applications and also with said backplane object, wherein said backplane object and the

client applications interoperate with one another to provide said integrated customer interface to

a plurality of communications network management products and services subscribed by the

customer.

        However, in the same field of endeavor, Riggins teaches a system for globally accessing

computer service comprising of clients and servers (Col. 1, line 5-10), includes

        said downloaded web-based GUI comprises a backplane object downloaded with, and

launched by said web-based GUI, said backplane object launching said one or more client

applications upon initiation by said customer, the backplane object further enabling inter-

application communications among the client applications and also with said backplane object,

wherein said backplane object and the client applications interoperate with one another to provide said integrated customer interface to a plurality of communications network management products and services subscribed by the customer (Fig 6, download applet 640, select service, which initiates applet 660).

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made incorporate the use of applet as taught by Riggins with Cianfrocca-Hogan for integrating applications for clients selection. Doing so will improve client server network communications, speeding up application download process using small pieces of program such as applets as aback plane would allow client server communication faster loading.

14.   Claims 6, 7, 63 and 64 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cianfrocca-Hogan-Riggins as applied to claims 5 or 62, in view of Radia et al (US. 5, 848,233).

15.   Claim 6, Cianfrocca-Hogan-Riggins does not explicitly the system comprises a logon object; a user object and running application in a frame independent from web browser.

However, in the same field of endeavor, Radia teaches a system for accessing network control server, for controlling access to network server. The system processes login control by downloading a login applet to clients. The applet function as a means for transact credential information to the server (Col. 8, lines 30-67), which is equivalent the claimed logon object and inherent the use of the logon object to create a session object for communicating with the order entry server to provide the customer authentication, wherein upon successful customer validation, the user interface downloads the one or more client applications and the Web-based GUI having the backplane object.

16.   Claim 7, Cianfrocca-Hogan-Radia discloses the system substantially, including a user

object for representing a current customer, the user object further communicating with the said

authentication server to determine the customer's entitlements to the Web enabled

communications network management services, wherein the backplane uses the entitlements to

display via said integrated interface only those web enabled services to which the user has

privilege (Hogan, users authentication and receiving information relate the users, Col. 6, lines 9-

30).

17.   Claims 8, 9, 65 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Cianfrocca-Hogan-Riggins-Radia as applied to claims 7 or 64, in view of Chung et al (US.

6,012,090).

18.   Claims 8-9, Cianfrocca-Hogan-Riggins discloses the invention substantially, including

application being execute by applets from client through browsers, which is equivalent to the

client application is run directly by the backplane object when the customer selects the data

management service associated with the client application.

        Cianfrocca-Hogan-Riggins-Radia fails to explicitly disclose running application in a

frame independent from a Web browser's window.

        However, in the same field of endeavor, Chung teaches a system for improve accessing

information over the Internet. The system includes the use of browsers, applet and using applets

to open frame independently from access browsing frame (Col. 6, lines 14-54).

        Thus incorporating Chung notion, with Cianfrocca-Hogan-Riggins-Radia to open new

frame independently from web browser's window, would have been obvious to one of ordinary

skill in the art at the time of the invention was made that was a matter of design choice. Because

running separate frame or windows, customer would save time to reload the main windows,

which may be served as an entry or menu page. The browser will eliminate repetitive download

and execute applet, thereby, navigations can be done faster one more effective. For the same

motivation, effectiveness and time consuming would enable one skill in the art to design system

as taught by Chung, which open a new frame rather than a new windows because it would speed

up the operations.

19.   Claims 10-17, 19, 66-73 and 75 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Cianfrocca-Hogan-Riggins-Radia as applied to claims 7 or 65, and what was

well known in the art.

20.   Claim 10, Cianfrocca-Hogan-Riggins-Radia does not explicitly discloses maintains

session in static memory

Official Notice (see MPEP § 2144.03 Reliance on "Well Known" Prior Art) is taken that

maintain session information in static memory was well known in the art. For example web

browser storing cookie in hard disk for late continue session.

It would have been obvious to one of ordinary skill in the art at the time of applicant's

invention to maintain session's information is static memory. Doing so will allow client to

continue the same sessions without repeating identical session even the client terminal losing

power in any event.

21.   Claim 11, Cianfrocca-Hogan-Riggins-Radia and well-know art discloses a set of common

graphic user interface objects for enabling the client applications and the backplane to provide

common look-and-feel desktop window management feature (Radia, applet, Col. 8, lines 30-67;

Hogan, look- and-feel web page, Fig. 4).

22.   Claims 12-15, Cianfrocca-Hogan-Riggins-Radia, and well-known art disclose the

invention substantially as claimed as described in claim 11.

It does not explicitly disclose the server providing data report comprising report requestor

and report viewer.

However, Cianfrocca-Hogan-Riggins-Radia teaches a client server system comprising the

use of applet, GUI for providing authentication, accessing database for generating invoice,

presenting invoice, etc., in response to client requests.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the

invention was made to recognize that was a matter of application choice to use Cianfrocca-

Hogan-Riggins-Radia to authenticate, access database generating and present report other than

invoice or billing. Doing so, system can be used with other application without imposing burden

in modifications and high cost.

23.   Claims 16, 17, and 19, Cianfrocca-Hogan-Riggins-Radia does not explicitly disclose an

inbox server for storing report and metadata for generating report.

Official Notice (see MPEP § 2144.03 Reliance on "Well Known" Prior Art) is taken that

inbox and metadata were well known in the art. Both being using the network communication

art, for example, inbox is being used to store message generating from e-mail applications and

metadata is being used as a description in HTML document.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made incorporate inbox and metadata to generate report and store for client access. Doing so will allow the system to communicate data in asynchronous mode.

24.   Claim 18 Cianfrocca-Hogan-Riggin-Radia discloses the invention substantially. It does not explicitly disclose the use of polling thread for open a second connection and listen to a second connect.

Official Notice (see MPEP § 2144.03 Reliance on "Well Known" Prior Art) is taken that using polling thread for acquiring data was well known in the art.

Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention was made use polling thread for open a new connection in order to acquiring data from the second connection. Doing to will allow system to collect information faster.

25.   Claims 58-75 are method claims corresponding to the systems in claims 1-18 and 19. They are rejected by the set for the set forth rationale.

26.   Claims 20-43, 45-57, 76-97 and 99-109 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:
Prior arts of the record teach the invention substantially, but they fail to teach individually or in combination that an integrated system for providing a plurality of communications network management services and products to a customer over the public internet, said network management services and products accessible from a client workstation employing a client

browser associated with said customer and receiving web based communications from a

communications service enterprise, said system comprising:

(a) one or more secure web servers for managing one or more secure client sessions over

the internet in response to customer entry into said system, each said one or more secure web

servers supporting secure communications with said client workstation;

b) one or more client applications integrated within a web-based GUI and downloaded

from the one or more secure web servers according to predetermined customer entitlements, each

of said one or more client applications for providing a customer interface integrated within said

web based GUI and enabling interactive communications with one or more communications

network management resources provided by said communications service enterprise via the one

or more secure web servers: and,

(c) each of said one or more secure web server supporting communication of request

messages entered by said customer via said customer interface to said one or more network

management resources providing a desired communications network management function;

wherein one or more remote application resource processes said request messages and

provides responses to said one or more secure web servers for secure uploading to said client

browser and display via said integrated customer interface, said one or more network

management resources

including a system for generating invoice documents relating to communications management

services provided by a communications service enterprise, comprising:

a client application downloaded from the one or more secure web servers for enabling

selection and presentation of invoice documents in accordance with customer entitlements, said

client application further generating an invoice request message in response to customer

selection of a specific invoice option and forwarding the invoice request message via the secure

web server; and

an invoice application server for maintaining a database of image files associated with

invoice documents from the application service and receiving the invoice request message, said

invoice application server accessing the database in response to a request message, generating a

response message including a customer selected invoice document, and downloading said

response message to said client workstation, whereby said customer selected invoice document is

formatted in a manner suitable for display via said integrated client interface.

wherein said one or more secure web servers supports a secure sockets layer

communications protocol including secure socket connections for encrypted communication

between said client browser and said secure web server, said one or more secure servers also

providing session management including customer identification, validation, entitlements and

encryption to link said session with said customer.

wherein said downloaded web-based GUI comprises;

a backplane object downloaded with, and launched by said web-based GUI, said backplane

object launching said one or more client applications upon initiation by said customer, the

backplane object further enabling inter-application communications among the client

applications and also with said backplane object, wherein said backplane object and the client

applications interoperate with one another to provide said integrated customer interface to a

plurality of communications network management products and services subscribed by the

customer.

wherein at least one of the one or more network management resources comprises: a

server providing a customer authentication function and for downloading a logon object to be

launched by said web-based GUI, the logon object accepting logon transactions from the

customer and creating a session object for communicating with said first server to provide said

customer authentication, wherein upon successful customer validation, the logon object sends a

command to the authentication server to download said one or more client applications and said

web-base GUI having the backplane object; a user object for representing a current customer, the

user object communicating with said authentication sever to determine the customer's

entitlements to the web enabled communications network management services, wherein the

backplane uses the entitlements to display via said integrated interface only those web enabled

services and products to which the user has privilege;

wherein the backplane object maintains session information received from a network

management resource in static memory for the duration of a session, and enables the one or more

client applications to access the static memory;

wherein at least one of the one or more network management resources comprises a

server for providing a customer data report management function comprising and a database for

maintaining an inventory of reports associated with a customer, at least one of said one or more

client applications including:

a report requestor application enabling creation and scheduling of customer specific

reports pertaining to usage of their switched communications networks and initiating generation

of report request messages for said one or more network management resources via said

integrated interface; and,

a report viewer application enabling display of reports in accordance with customer entitled

reporting options;

wherein said report manager server accesses report items from said database according to

a received report request message, and generates a response message including a metadata

description of reporting items to be included in said report,

wherein customer-specific data from at least one of said one or more network

management resources and said metadata description of customer-selected reporting items arc:

utilized to generate a completed report for presentation generate a completed report for

presentation to said customer via said integrated interface;

wherein at least one of the one or more network management resources further comprises

a report scheduler system for initiating periodic generation of reports from other network

management resources at a customer-specified frequency;

wherein at least one of the one or more network management resources includes a

database for storing and maintaining customer specific report data to be reported to said

customer, and, a centralized inbox server for receiving a report availability response from said

report management server including a metadata description for generating said report, said inbox

server uploading said stored customer specific report data and the metadata description

associated with the report data to said client workstation via the one or more secure web servers

for generation and presentation of a customer report via said integrated interface; and

wherein at least one of said one or more network management resources provides a

priced call detail data reporting function for providing customer specific data pertaining to usage

of a customer's switched communications network.

27.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Bunjob Jaroenchonwanit whose telephone number is (703) 305-

9673.

The examiner can normally be reached on Monday to Thursday from 7:00 A.M. to 5:30

P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mark Rinehart can be reached on (703) 305-4815. The fax for this Group is (703)

308-6296.

The fax phone numbers for the organization where this application or proceeding is

assigned are as follows:

(703) 746-7240   (For Status Inquiries, Informal or Draft Communications, please label
                 "PROPOSED" or "DRAFT"),

(703) 746-7239   (For Official Communications Intended for entry; please mark
                 "EXPEDITED PROCEDURE"),

(703) 746-7238   (For After Final Communications).

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 305-3900.

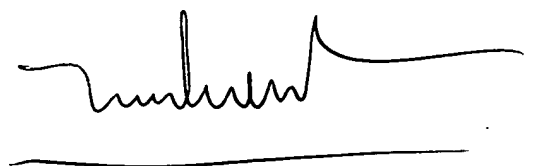Any response to a final action should be mailed to:

BOX AF

Commissioner of Patents and Trademarks Washington, D.C. 20231

Or faxed to:

Hand-delivered responses should be brought to 4th Floor Receptionist, Crystal Park II,

2021 Crystal Drive, Arlington VA 22202.

Bunjob Jaroenchonwanit
Examiner
Art Unit 2152

LE HIEN LUU
PRIMARY EXAMINER